

NCL series – Data sheet

Membrane-covered amperometric 3-electrode sensor for the detection of free chlorine (inorganic and organic).



Features	
Indicator	Free chlorine Inorganic and organic (based on cyanuric acid)
Chlorination compound	Sodium hypochlorite, calcium hypochlorite, chlorine gas, electrolytically generated chlorine, and chlorine compounds based on isocyanuric acid
Application	Swimming pool water, drinking water, seawater, industrial and process water, preferably surfactant free. Surfactants are partially tolerated.
Interferences	ClO ₂ 100%, O ₃ , and monochloramine
pH range	4 10 (see diagram last page of the data sheet, refer to operating instruction if pH > 8)
Conductivity	100 – 63000 μS/cm
Flow rate	30 60 l/h
Pressure range	0 1 bar (suggested range 0.3 0.5 bar, no pressure impulses and/or vibrations)
Working temperature	0 45°C (no ice crystals in the measuring water)
Temperature compensation	Automatically
Run-in time	First start-up < 2 h
Calibration	Reference photometric methd DPD1
Measuring range information	Signal slope can range from +50% to -50% compared to nominal slope
Slope drift	< -3% per month (25°C, pH 7.2, drinking water)
Materiali	PVC, PEEK, Inox steel AISI 316 Ti, microporous membrane

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Maintenance	
Calibration	Recommended once a week and whenever the working conditions (free chlorine concentration, temperature, or pressure) and/or electrolyte solution, and/or membrane cup are modified.
Electrolyte solution	To replace 3 - 6 months depending on the water quality
Membrane cap	To replace 6 - 12 months depending on the water quality

(Subject to technical changes)

NCL series ordering data:

Type	Measuring range [ppm]	Resolution [ppm]	Output	Power supply	Item number
NCL T20	0.05 ...20.00	0.01	0 ... -2000 mV	±5...±15 VDC +10...+30 VDC Max 10 mA	NCL0001A0
NCL T10	0.05 ...10.00	0.01			NCL0003A0
NCL T5	0.05 ...5.00	0.01			NCL0004A0
NCL T2	0.010 ...2.000	0.001			NCL0002A0
NCL C20	0.05 ...20.00	0.01	4 ... 20 mA	12 ... 30 VDC	NCL0001A1
NCL C10	0.05 ...10.00	0.01			NCL0003A1
NCL C5	0.05 ...5.00	0.01			NCL0004A1
NCL C2	0.01 ...2.00	0.01			NCL0002A1

(Subject to technical changes)

NCL series accessories:

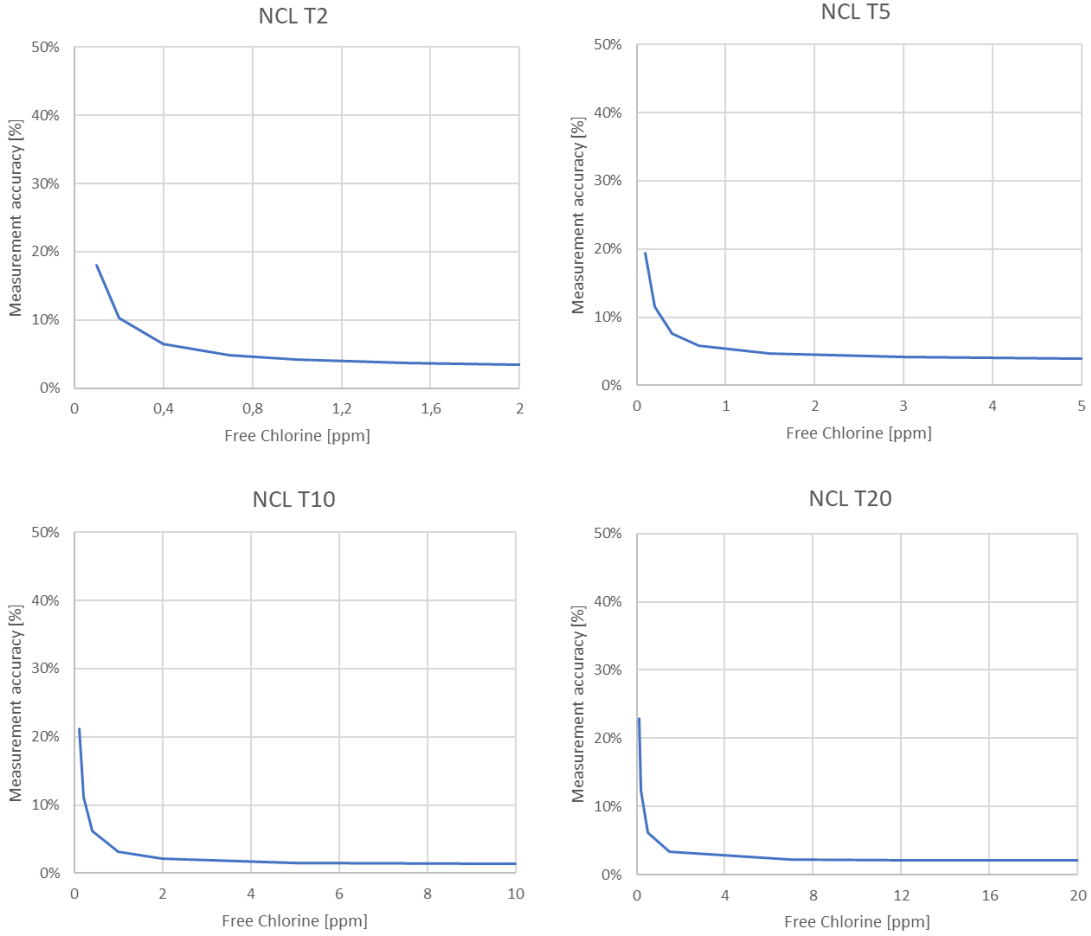
Type	Item number
Membrane cap	NAS0003A2
Electrolyte solution	NSH0001A1
NCL/NCT cable (2m)	NAS0005A1

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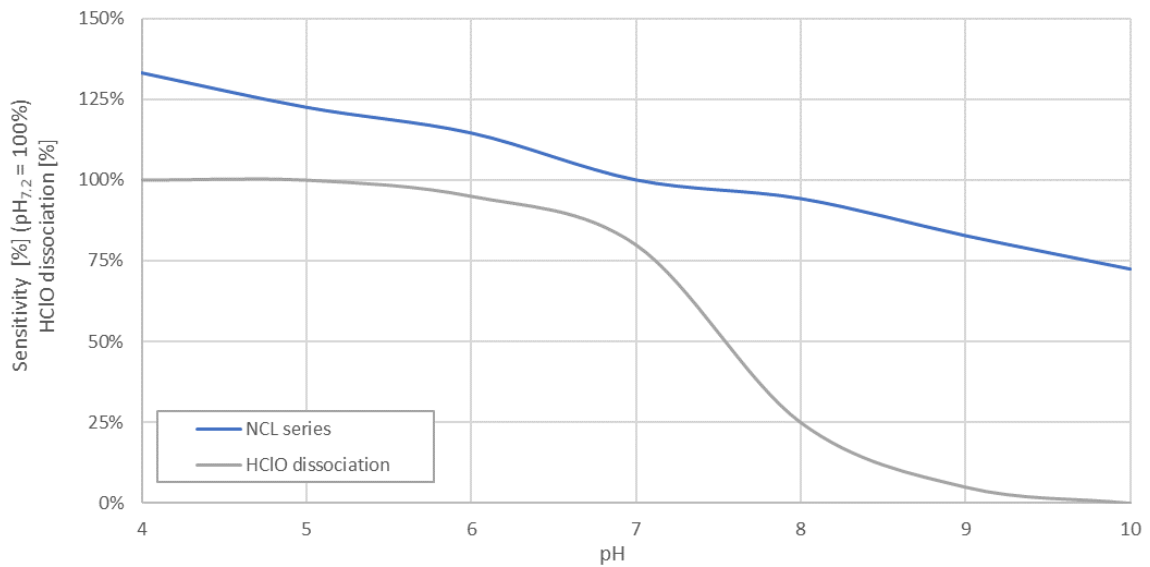
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NCL series accuracy (pH 7.2, 25°C)*



*Drinking water
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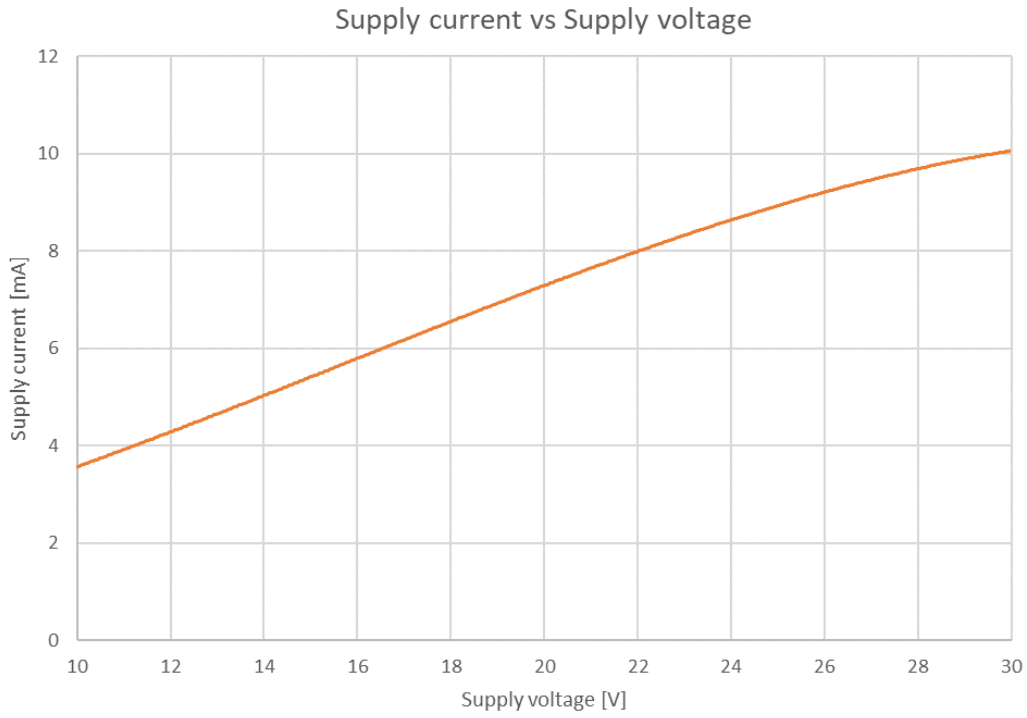
NCL sensor response vs pH



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